IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Luis M. Ortiz	**EXAMINER:** Elahee, MD S
SERIAL NO.: 09/887,492	**GROUP:** 2614
FILED: 06/22/2001	**ATTY DKT NO.:** Ortiz-1001
TITLE:	SYSTEMS, METHODS AND APPARATUSES FOR BROKERING DATA BETWEEN WIRELESS DEVICES AND DATA RENDERING DEVICES

<u>Please forward all correspondence to:</u>

ORTIZ & LOPEZ, PLLC
Patent Attorneys
P.O. Box 4484
Albuquerque, NM 87196-4484

REPLACEMENT BRIEF

Mail Stop Appeal
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<u>APPELLANT'S APPEAL BRIEF UNDER C.F.R. §1.192</u>

I. REAL PARTY IN INTEREST

Mr. Luis M. Ortiz is the inventor of and also the real party in interest in the present invention as claimed. Mr. Luis M. Ortiz is the "Appellant" entitled to bring forward this appeal.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are pending in the application.

Claims 32 through 78 have been withdrawn from consideration following a restriction requirement during early prosecution.

Claims 4-6, 12-14, 24-29, 79-87, 95, 96, and 101-104 are cancelled.

Claims 1-3, 7-11, 15-23, 30, 31, 88-94, 97-100, and 105-117 are the subject of this appeal. Of these appealed claims, claims 1, 15, 30, 100 and 106 are independent.

Claims 1-3, 7-9, 15-20, 22, 23 , 30, 31, 89-93, 98-100, 105-113 and 115-117 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al (US 5,793,630) in view of *Hanada* (US 6,000,864).

Dependent claims 10, 21 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Theimer* et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Challener et al* (US 6,591,297).

Dependent claims 11, 88, 94 and 97 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Theimer* et al (US 5,793,630) in view of *Hanada* (US 6,000,864) and further in view of *Magro et al* (US 6,457,08).

Dependent claim 14 stand rejected under 35 U.S.C. 103(a) as being upatentable over *Theimer* et al (US 5,793,630) in view of Hanada (US 6,000,864) and further in view of *Ronen* (US. Pub. No. 2002/0156708).

IV. STATUS OF AMENDMENTS

None. No amendments were filed subsequent to final rejection.

Application No.: 09/887,492
Ortiz-1001

V. SUMMARY OF CLAIMED SUBJECT MATTER

In accordance with the requirements of 37 CFR §41.37(c)(1)(v), a concise explanation of the subject matter defined in each claim that is the subject of this appeal is provided below. Reference to locations in the specification by page and line number, and to the drawings by reference characters, re identified in claim chart format in order to assist the board in finding support for the claimed subject matter:

CLAIM 1	Location within Specification/Drawings
A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:	FIGS. 4 to 12. ABSTRACT Pages 11-12 of Specification.
identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or its user;	FIG. 4; FIG. 6; FIG. 7. **Page 11 of Specification:** "DRDs can generally be considered "undedicated" rendering devices (e.g., "unassigned" as a resource and/or generally available and open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate."
providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD's geographic	FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12. **Page 11 of Specification:** "In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs. " "In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices." "In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user's location and/or profile." Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a

Application No.: 09/887,492
Ortiz-1001

location and a WD user profile associated with said WD;	DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
said network resource identifying the location, rendering capabilities and operational status of at least one DRD based on at least one of said WD's location and said WD user profile;	FIG. 9; FIG. 12. Pages 11-12 of Specification: "In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile. Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)." Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity). " Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user

	regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."
said network resource providing said WD with location information for at least one publicly accessible DRD;	FIG. 10. Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6."
selecting a DRD with said WD;	FIG. 6; FIG. 7 Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."
at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and	FIG. 10. Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62." Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."
transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.	FIGS. 4 to 6; FIGS. 8 to 10. Page 25: "A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user's location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile." "Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an

	appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."

CLAIM 2	Location within Specification/Drawings
The method of claim 1 including a step wherein said DRD renders the data only after a render command is provided to said DRD through said WD.	FIG. 5 ABSTRACT Pages 19 and 24 of the Specification.

CLAIM 3	Location within Specification/Drawings
The method of claim 2 wherein said render command includes a passcode.	FIGS. 8, 10 and 11. ABSTRACT Pages 19 and 24 of the Specification.

CLAIM 7	Location within Specification/Drawings
The method of claim 1 wherein the data is rendered by said DRD after said render command is provided by a WD user on a user interface associated with said DRD.	FIG. 5, 8, 10 and 11 ABSTRACT Pages 19 and 24 of the Specification.

CLAIM 8	Location within Specification/Drawings
The method of claim 1 wherein the data is retrieved from a memory assigned to the WD user only after the WD user provides a passcode to said DRD.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 9	Location within Specification/Drawings
The method of claim 8 wherein said passcode is provided to said DRD by the WD.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 10	Location within Specification/Drawings
The method of claim 8 wherein said passcode is provided at a user interface associated with said DRD.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 11	Location within Specification/Drawings
The method of claim 8 wherein said command includes decryption coding.	FIGS. 2 and 5. ABSTRACT Pages 22 of the Specification.

CLAIM 14	Location within Specification/Drawings
The method of claim 1 including a step wherein said network resource provides the WD with a passcode for use on an interface integrated with said DRD to cause said DRD to render the data.	Pages 21, Paragraph 2 of Specification.

CLAIM 15	Location within Specification/Drawings
A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a	Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also

Application No.: 09/887,492

Ortiz-1001

multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:	be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
identifying data with the WD to render at a publicly accessible DRD;	FIG. 4. Page 24: "In accordance with aspects of using the present invention methods of use will now be described. Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD."
providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;	FIG. 9; FIG. 10; FIG 12. Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located	FIG. 10. Page 19: "WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming

near the WD, wherein DRD location information is based on said WD geographic location information;	WD's location (e.g., determinable by GPS) and/or profile information." "Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
selecting a DRD with the WD for rendering said data;	FIG. 6; FIG. 7 Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."
providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;	FIG. 10. Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62." Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."
physically locating the DRD at the DRD's publicly accessible location; and	Page 25: "After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."
requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.	FIGS. 4 to 6; FIGS. 8 to 10. Page 25: "A WD user can render the data directly at the DRD if its location is known to the user, or the user can request networks in communication with the WD for assistance in locating an appropriate DRD. DRD location can be based on the user's location or proximity to DRDs (known or determinable by the network or WD) and/or can be based on user requirements provided to the network or embodied in a WD user profile." "Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63. Referring to Figure 7, the WD can first be used by the WD user to request network assistance in locating an appropriate DRD 71. After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73."

Application No.: 09/887,492

Ortiz-1001

CLAIM 16	Location within Specification/Drawings
The method of claim 15 wherein said data is transferred to said DRD from said public wireless communications network resources following the request at said WD.	FIG. 5 ABSTRACT Pages 19, 24 and 25 of the Specification.

CLAIM 17	Location within Specification/Drawings
The method of claim 16 wherein said public wireless communications network resources facilitates transfer of said data to said DRD from a memory associated with said WD.	FIGS. 12. ABSTRACT Pages 17 of the Specification.

CLAIM 18	Location within Specification/Drawings
The method of claim 17 wherein said step of requesting that said data be transferred to said DRD is followed by a step that includes entering a passcode by the WD user at said DRD to render the data.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 19	Location within Specification/Drawings
The method of claim 16 wherein said data is retrieved from a mailbox assigned to said WD only after a passcode is provided to said DRD by said WD user.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

Application No.: 09/887,492
Ortiz-1001

CLAIM 20	Location within Specification/Drawings
The method of claim 19 wherein said passcode is provided to said DRD by said WD.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 21	Location within Specification/Drawings
The method of claim 19 wherein said passcode is provided at a user interface associated with said DRD.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 22	Location within Specification/Drawings
The method of claim 15 wherein said DRD renders data after a render command is provided to said DRD by said WD user.	FIGS. 2, 8, 10, 11. ABSTRACT Pages 21-22 of the Specification.

CLAIM 23	Location within Specification/Drawings
The method of claim 22 wherein said render command includes a passcode.	Pages 21, Paragraph 2 of Specification.

CLAIM 30	Location within Specification/Drawings
A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:	FIGS. 4 to 12. ABSTRACT
using a wireless device (WD)	FIGS. 10 to 12.

11   Application No.: 09/887,492
Ortiz-1001

to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;	Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
receiving DRD location and capability information at the WD for at least one DRD located near the WD;	FIG. 9; FIG. 12.

Pages 11-12 of Specification:

"In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile.

Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."

Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity). "

Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based |

	on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."
selecting a DRD with said WD for rendering data;	FIG. 6; FIG. 7 Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."
the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;	FIG. 9; FIG. 12. Pages 11-12 of Specification: "In accordance with another feature of the present invention, user/WD location information and/or profile information can be determined/provided via networks in communication with a user/WD, and DRD location information can be provided to user/WD via the networks based on user/WD location and/or profile. Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)." Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity)." Page 26: "When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92."
selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and	Page 25: "After the DRD has been located 71, data for rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73." FIGS. 4 to 6; FIGS. 8 to 10. Page 25: "Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63."
providing the data from at	FIG. 4.

least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.	Page 24: "Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD." Page 24: "Enhanced messaging applications have also been developed in response to the convergence of voice and data networks and improving wireless technology. Unified Messaging solutions allow carriers and Internet service providers to manage customer e-mail, voice messages and fax images and can facilitate delivery of these communications to PDAs, telephony devices, pagers, personal computers and other capable information retrieval devices, wired or wireless."

CLAIM 31	Location within Specification/Drawings
The invention of claim 30, wherein said DRD renders said data after a render command is provided at said DRD by the user associated with said WD.	FIG. 5 ABSTRACT Pages 19, 24 and 25 of the Specification.

CLAIM 88	Location within Specification/Drawings
The method of claim 31 wherein said rendering command includes decryption coding.	FIGS. 2 and 5. ABSTRACT Pages 22 of the Specification.

CLAIM 89	Location within Specification/Drawings
The method of claim 30 further comprising the steps of: receiving at a network server a request associated with said WD for delivery of said data for rendering at said DRD;	FIG. 5 ABSTRACT Pages 19, 24 and 25 of the Specification.

Application No.: 09/887,492

Ortiz-1001

determining if delivery of said data can be approved by at least one of said network and/or said DRD; and	FIG. 12 Pages 12 and 18 of the Specification.
if delivery is approved, said server processes the request including facilitating delivery of said data to said DRD.	FIG. 12 Pages 12, 18 19, 24 and 25 of the Specification.

CLAIM 90	Location within Specification/Drawings
The method of claim 89 further comprising the step of receiving said data from said server at said DRD.	FIGS. 8, 10 and 11. ABSTRACT Pages 12, 18 19, 21, 24 and 25 of the Specification.

CLAIM 91	Location within Specification/Drawings
The method of claim 90 wherein said data is received at said DRD via a data network supporting said DRD.	FIGS. 8, 10 and 11. ABSTRACT Pages 12, 18 19, 21, 24 and 25 of the Specification.

CLAIM 92	Location within Specification/Drawings
The method of claim 90 further comprising the step of rendering said data at said DRD following a rendering command received at said DRD by said WD.	FIG. 5, 8, 10 and 11. ABSTRACT Pages 19, 21, 24 and 25 of the Specification.

CLAIM 93	Location within Specification/Drawings

Application No.: 09/887,492
Ortiz-1001

The method of claim 92 wherein said rendering command includes a passcode.	FIGS. 8, 10 and 11. ABSTRACT Pages 21 of the Specification.

CLAIM 94	Location within Specification/Drawings
The method of claim 92 wherein said rendering command includes decryption coding.	FIGS. 2 and 5. ABSTRACT Pages 22 of the Specification.

CLAIM 97	Location within Specification/Drawings
The method of claim 1 wherein said rendering command includes decryption coding.	FIGS. 2 and 5. ABSTRACT Pages 22 of the Specification.

CLAIM 98	Location within Specification/Drawings
The method of claim 1 wherein said commands enable WD user manipulation of said data during rendering of said data at said DRD using said WD.	Pages 12 and 22 of the Specification.

CLAIM 99	Location within Specification/Drawings
The method of claim 98 wherein said DRD is at least one of: a presentation projector, a video display, and a photocopier.	Pages 23 and 24 of the Specification.

Application No.: 09/887,492

Ortiz-1001

CLAIM 100	Location within Specification/Drawings
A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:	FIG. 1; FIGS. 8-12. Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on	FIG. 1; FIGS. 8-12. Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines

Application No.: 09/887,492
Ortiz-1001

the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;	(ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;	FIG. 1; FIGS. 8-12. Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
selecting only one DRD from the at least one publicly accessible DRD using the WD;	FIG. 6; FIG. 7 Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."
obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;	FIG. 10. Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62." Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."
selecting data for rendering	Page 25: "After the DRD has been located 71, data for

at the DRD using the WD after the only one DRD is physically located; and	rendering can be selected at the WD 72 and the network requested to transfer the data to the DRD 73." FIGS. 4 to 6; FIGS. 8 to 10. Page 25: "Once an acceptable DRD has been selected, the user can request the network to transfer the data to the DRD 63."
transferring data using the WD to the DRD for rendering.	FIG. 4. Page 24: "Referring to Figure 4, a WD user can generally render data at an unassigned DRD by selecting data for rendering using a WD 41 (e.g., through the WDs associated UI). Once data has been selected, the user issues a command at the WD to provide data 42 to the DRD. Data can be provided directly to the DRD by the WD, or via a network supporting the WD."

CLAIM 105	Location within Specification/Drawings
The method of claim 100 wherein said commands enable the WD user to manipulate said data during its rendering at said DRD using said WD.	Pages 12 and 22 of the Specification.

CLAIM 106	Location within Specification/Drawings
A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:	Page 5: "Wireless Intelligent Networks (WIN) are generally known as the architecture of the wireless switched network that allows carriers to provide enhanced and customized services for mobile telephones." Pages 6-7: "Wireless location based services now being deployed on wireless networks enable wireless service providers to utilize information regarding the geographic location of wireless devices/callers to provide public safety (e.g., E-911), location-sensitive billing, location-specific information (e.g., advertising) and tracking services." Page 11: "In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices." Page 17: "Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user=s location by routing

Application No.: 09/887,492

Ortiz-1001

	location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12."
	FIG. 4; FIG. 6; FIG. 7.
	Page 11 of Specification: "DRDs can generally be considered "undedicated" rendering devices (e.g., "unassigned" as a resource and/or generally available and open to the acceptance and rendering of data from unfamiliar users). DRDs can be located generally throughout an enterprise or private campus, or be distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate. "
receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;	FIG. 7 to 9; FIG. 9; FIG. 10; FIG. 12. Page 11 of Specification: "In accordance with a feature of the present invention, DRDs can receive data directly from WDs and/or through networks after/with coordination by WDs with networks providing data to DRDs. " "In accordance with another feature of the present invention, the DRD methods can be included in DRD adapted/network-enabled Kiosks, printers, photocopiers, ATMs, telephony, video monitors, conferencing and other multimedia-enabled devices." "In accordance with another feature of the present invention, a WD can be used to locate a DRD based on a WD and/or WD user's location and/or profile." Page 17: "Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user's location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12." Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network

	28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise."
the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;	Page 17: "Satellite global positioning system (GPS) 9 capabilities installed at the wireless network interface can assist in determining a WD 6 user's location by routing location information to the VLR19 /HLR 13 when a WD user communicates with a supporting wireless network 12." Page 19: "In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information."
the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;	Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6. The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user. DRD brokering and location functionality can be included in familiar rendering devices (e.g., Internet Kiosks, printers, photocopiers, fax machines, automatic teller machines (ATMs), video monitors, conferencing other multimedia-enabled devices) that are IR, RF and/or network communication enabled. DRDs can be public or exclusive to an enterprise." FIG. 9; FIG. 12. Pages 11-12 of Specification: "Another feature of the present invention allows the network to verify DRD availability (e.g., operational readiness)."

Application No.: 09/887,492
Ortiz-1001

	Page 18: "A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity)."
the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;	Page 19: "DRDs 7 can be easily locatable using network 28 resources and /or WDs 6. Information related to a DRD's physical location and rendering capabilities, for example, can be registered at network 28 resources (e.g., an HLR) supporting network communication with the DRD 7. DRD information regarding capabilities can also be held within DRD memory 30 for retrieval by the network and/or WD 6. In accordance with this aspect of the present invention, WD proximity-based DRD locating/finding technology should enable WD users to locate available DRDs 7 based on a DRD's 7 proximity to the a roaming WD's location (e.g., determinable by GPS) and/or profile information. Profile information related to the DRD 20 can be provided from memory 30 at the DRD 20 and/or through the network 28. User/WD 6 location information can be determined via networks in communication with the user's WD 6."
the user selecting only one publicly accessible DRD for rendering data; and	FIG. 6; FIG. 7 Page 19: "The user can choose to render data at the DRD 7 suggested by the network. Several DRDs can be identified by the network 28 for selection by the WD user."
the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.	FIG. 10. Page 25: "If the user does not know the location of a DRD, the user can request network assistance in identifying the location and/or capabilities of a DRD 62." Page 26: "The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD."

CLAIM 107	Location within Specification/Drawings
The method of claim 106 further comprising the steps of: receiving a request at a network server from said GPS-enabled hand held wireless device to retrieve data stored in	FIG. 10 ABSTRACT Pages 19, 20 and 26 of the Specification.

Application No.: 09/887,492

Ortiz-1001

memory associated with said GPS-enabled wireless hand held device and to transfer said data to the at least one publicly accessible DRD identified by the network resource; and	
said network server transferring said data to said at least one publicly accessible DRD in response to the request.	FIG. 10 ABSTRACT Pages 19, 20 and 26 of the Specification.

CLAIM 108	Location within Specification/Drawings
The method of claim 107 further comprising the step of said at least one publicly accessible printer receiving said data from said network server.	FIG. 10 ABSTRACT Pages 19, 20 and 26 of the Specification.

CLAIM 109	Location within Specification/Drawings
The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available DRD.	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 21-22 of the Specification.

CLAIM 110	Location within Specification/Drawings
The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from the wireless hand held	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 9, 16, 17, and 21-22 of the Specification.

device.	

CLAIM 111	Location within Specification/Drawings
The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 9, 16, 17, and 21-22 of the Specification.

CLAIM 112	Location within Specification/Drawings
The method of claim 106 further comprising the steps of: a user of said GPS-enabled hand held wireless device physically locating said publicly accessible DRD; the user of said GPS-enabled hand held wireless device transmitting a request to a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data said publicly accessible; and said network server transferring said data to said publicly accessible DRD in response to the request.	FIG. 10 ABSTRACT Pages 19, 20 and 26 of the Specification. FIG. 10 ABSTRACT Pages 19, 20 and 26 of the Specification.

CLAIM 113	Location within Specification/Drawings
The method of claim 112 further comprising the step of said publicly accessible DRD receiving said data from said network server.	FIGS. 8, 10 and 11. ABSTRACT Pages 12, 18 19, 21, 24 and 25 of the Specification.

Application No.: 09/887,492
Ortiz-1001

CLAIM 114	Location within Specification/Drawings
The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of said wireless hand held device directly onto a user interface associated with said publicly accessible DRD.	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 21-22 of the Specification.

CLAIM 115	Location within Specification/Drawings
The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from said wireless hand held device.	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 9,12, 16, 17-19 and 21-25 of the Specification.

CLAIM 116	Location within Specification/Drawings
The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from said network server after further receiving a wireless authorization signal provided locally from said wireless hand held device.	FIGS. 2, 5, 8, 10 and 11 ABSTRACT Pages 9, 16, 17, 19 and 21-25 of the Specification.

Application No.: 09/887,492

Ortiz-1001

CLAIM 117	Location within Specification/Drawings

The method of claim 106 further comprising the steps of:
    a user of a hand held wireless device physically locating a publicly accessible DRD;
    the user of said hand held wireless device wirelessly transmitting data from said hand held wireless device to said publicly accessible DRD
	FIG. 10
	
	ABSTRACT
	
	Pages 19, 20, 26 and 27 of the Specification.

said publicly accessible DRD receiving said data from said hand held wireless device; and said publicly accessible DRD rendering said data.	Pages 12 and 22 of the Specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether independent **claim 1** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 15** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 30** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 100** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Whether independent **claim 106** is unpatentable under 35 U.S.C. §103(a) over *Theimer et al* (US 5,793,630) in view of *Hanada* (US 6,000,864).

Application No.: 09/887,492
Ortiz-1001

VII. ARGUMENT

A. GROUPING OF CLAIMS

Appellant understands that, according to 37 CFR §41.37(c)(1)(vii), when multiple claims subject to the same ground of rejection are argued as a group, the Board may select a single claim from the group of claims that are argued together to decide the appeal with respect to the group of claims as to the ground of rejection on the basis of the selected claim alone. Appellant has identified five groups of claims being argued herein and which are being placed under a subheadings to help the Board identify the group of claims by number.

The five (V) groups of claims are being appealed as follows:

GROUP I CLAIMS:

Group I consists of claims 1-3, 7-11 and 14. **Claim 1** is independent. Claims 2-3, 7-11 and 14 stand or fall with independent claim 1. Independent claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

GROUP II CLAIMS:

Group II consists of claim 15 to 22. **Claim 15** is independent. Claims 16 to 22 stand or fall with independent claim 15. Independent claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*

GROUP III CLAIMS:

Group III consists of claims 30, 31, 88 to 94 and 97 to 99. **Claim 30** is independent. Claims 31, 88 to 94 and 97 to 99 stand or fall with independent claim 30. Independent claim 30 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada*.

28

GROUP IV CLAIMS:

Group IV consists of claims 100 and 105. **Claim 100** is independent. Claim 105 stands or falls with independent claim 100. Independent claim 100 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada.*

GROUP V CLAIMS:

Group V consists of claims 106 to 117. **Claim 106** is independent. Claims 107 to 117 stand or fall with independent claim 106. Independent claim 106 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Theimer et al* in view of *Hanada.*

B. BACKGROUND AND USE OF TERMINOLOGY

The Applicants' invention is related to what is today commonly referred to as the field of *location-based wireless services* and also to wireless handheld data communications device applications.

At the time of Appellant's patent application filing, handheld wireless device users were generally restricted to viewing data using very small, device-based viewers having limited GUI functionality. Since then, wireless handheld device users have been provided with increased wireless data communications bandwidth and a plethora of handheld devices are now available to manage and review various data. Most handheld device users access data when they are away from their home or office, therefore data rendering devices (e.g., printers and video displays) are not always unavailable to assist user in rendering data outside of the small screen provided on their wireless handheld devices. In public, the location of a working, publicly accessible DRDs are unknown or they are inconveniently located. Mobile device users still have limited access to data rendering resources and network resources necessary to utilize data retrieved through public wireless communication networks when using mobile devices away from their own video displays and printing equipment located at their homes or office. Wireless

Application No.: 09/887,492
Ortiz-1001

device users "on the go" are still mostly required to wait to print or view data on a larger video monitor until they can gain access to known and familiar wired or fixed computing devices that are dedicated to a particular user as rendering peripherals and systems (e.g., personal computer with printing and display capabilities, typically owned or controlled by the user). A major limitation at the time the present patent application was filed, and which continues today, requires that users must know where rendering peripherals are physically located prior to rendering.

For the remote wireless device user such as business travelers in airports or driving on the road, convenience and time have become important considerations in choosing how to access and view data. Oftentimes, wireless device users are forced by circumstance to defer data retrieval until compatible equipment can be located or accessed, or users must rely on limited or inconvenient rendering systems and methods (e.g., relying again on the use of very small displays located in their hand held wireless devices). Unfortunately, many wireless device users forego data rendering plans altogether while traveling for business or pleasure because of technological limitations in the field of mobile computing at the time when the Appellant filed his patent application that is the subject of this appeal.

The present invention was filed with the United States Patent and Trademark Office by Appellant to present an invention that would overcome this shortfall in the wireless communications field by presenting a new location-based service to handheld wireless mobile device users wanting to render data from the mobile device but needing to find publicly available data rendering device (e.g., printers, monitors) to do so when the data rendering device locations are not yet known to the wireless device users.

Appellant provides the following definitions for terminology used in the appealed claims, terminology which is supported throughout the specification and prosecution record:

"Handheld Wireless Devices." Handheld Wireless devices (WDs) in accordance with its use and the teaching throughout the specification and in the record of prosecution for the claimed invention includes wireless

Application No.: 09/887,492
                                                                        Ortiz-1001

telecommunication-enabled mobile phones, personal data assistants (PDAs), and smart phones, such as what is now commonly known as the Blackberry and Palm class of handheld devices, which is described throughout Appellant's specification and drawings.

"Data Rendering Devices." Data Rendering Devices (DRDs) in accordance with its use and the teaching throughout the specification and in the record of prosecution for the claimed invention includes video monitors, Internet Kiosks, multimedia projectors and ATM machines, which have not previously been assigned to a user's handheld wireless device (WD) and are physically located in a publicly location that is generally unknown to users but openly accessible to the public and to public use. DRDs in accordance with Appellant's invention are meant to be public, and because of this their location is often not already known by or considered by the handheld wireless device (WD) user when requesting the assistance of a network to find a DRD.

"Publically Accessible" DRDs. It is important given the solution presented by Appellant that DRDs are *"publically accessible"* to handheld wireless device users when needed. Publicly available DRDs in accordance with its use and teaching throughout the specification and as written in the Summary of the Invention and as used throughout the record of prosecution, are "distributed throughout communities for accessibility by the public. It is an advantage of the present invention for DRDs to be made publically available and easy to locate." One or many DRDs can be located with the assistants of a telecommunication network and equipment for wireless device users (e.g., a cellular network), and DRD location is ideally based on the handheld device user's own physical location and/or a user's profile. Also, something is "public" as defined by *Merriam-Webster's Dictionary of Law (1996)* when it is "accessible or visible to the public."

"Locate" and Provide WDs "Directions" to DRDs. In accordance with its use and the teaching throughout the specification and in the record of prosecution for the claimed invention, to "locate" means that DRDs are found for WD users using network resources. "Directions" are what is used to locate DRDs and "directions" are also provided to a WD user through the user's WD

based on the geographic location of the WD (and its user) or the WD user profile. Providing "directions" to the DRDs, in accordance with the specification, can include a map, assists users to physically locate publically accessible DRDs whose locations were not previously known to the WD user.

"Operational Readiness" of DRDs. "Operational" means "Fit for proper functioning; ready for use: *[as in] an operational aircraft...",* according to The American Heritage® Dictionary of the English Language, Fourth (2006, Houghton Mifflin Company). Also according to the American Heritage dictionary, "readiness" means "[p]repared or available for service, action, or progress: *I am ready to work."*

C. APPLICABLE LEGAL STANDARD

The relevant statute cited in rejecting Appellants' claims is 35 U.S.C. §103(a). The obligation of the Examiner to go forward and produce reasoning and evidence in support of obviousness under 35 U.S.C. §103 is clearly defined at M.P.E.P. §2142:

> The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

M.P.E.P. §2143 sets out the three basic criteria that a patent examiner must satisfy to establish a *prima facie* case of obviousness necessary for establishing a rejection to a claim under 35 U.S.C. §103:

> 1. some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
>
> 2. a reasonable expectation of success; and
>
> 3. the teaching or suggestion of all the claim limitations by the prior art reference (or references when combined).

In the absence of such a *prima facie* showing of obviousness under 35 U.S.C. §103 by the examiner (assuming there are no objections or other grounds for

Application No.: 09/887,492
Ortiz-1001

rejection), an Applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443 (Fed. Cir. 1992).

Thus, in order to support an obviousness rejection under 35 U.S.C. §103, the Examiner is obliged to produce evidence compelling a conclusion that each of the aforementioned criteria has been met. If the Examiner fails to produce such a conclusion for each of the aforementioned criteria, the rejection must be withdrawn.

To overcome the unpatentable rejection, the Appellant need only demonstrate that not all elements of a *prima facie* case of obviousness have been met, *i. e.*, show that *Theimer et al* in view of *Hanada* fails teach or suggest every element in each of the Appellants' independent claims associated with the relevant reference used for their rejection.

D. UPTATENTABILITY UNDER 35 U.S.C. 103(a) IS NOT ESTABLISHED USING *THEIMER ET AL* IN VIEW OF *HANADA*

Theimer et al is the predominant reference used as a basis to reject Appellant's independent claims 1, 15, 30, 100 and 106. ***Hanada*** is only combined with *Theimer et al* to incorporate *Hanada's* teaching of a printer as a rendering device capable of *notifying, by short range communication,* to an information providing apparatus such as a computer about the amount of time that it might take for data to be printed. Examiner mistakenly believes and implies that the teaching of *rendering time* is also a teaching of "operational readiness" as taught by Appellant for a remote data rendering device. These concepts are not the same based on how Appellant defines operational readiness.

i. Regarding "Operational Readiness."

Hanada is combined with *Theimer et al* to teach "operational readiness" as claimed by Appellant. "Operational readiness" is found as only one element in clams 1, 30, 100 and 106.

It would be burdensome on a mobile device user to have a network locate a DRD for the user, and then travel a distance to the DRD location based on directions provided by the network and handheld device only to find out that the DRD is not operation. Appellant provides the following in pages 17-18 of the specification:

> A DRD 7, serving as an apparatus adapted for rendering data associated with a data rendering request issued by a WD 6, includes an authorization module 21, communications means 23, rendering means 25, and a microprocessor 24. The authorization module 21 approves receipt of rendering data in accordance with a request initiated by a WD 6. The authorization module 21 can approve or deny the request to render data based on the DRDs 7 readiness status 27. A status monitor 27 can be provided to track the operational readiness of the rendering means 25 (which can include printing, display and retrieval hardware status, and microprocessor 24 load/communications activity).

Hanada specifically describes the printing of images from a still camera connected wirelessly and at short range, via infrared, to a printer. *Hanada* is unique in its ability to notify the data providing device about how much time it will take to print data at the printer, not whether the printer is operational and can accept data from a user. Indeed, many other references could have also been used in combination with *Theimer et al* for equipment capable of rendering data and notifying a computer about how long a print job might take or if a print job has failed, but not whether a device is able to receive data on behalf of a user so that the user does not waste valuable time utilizing the device. Appellant does not contest the existence of a useful capability in the printer such as that taught by *Hanada*, or where run-time or wait-time information might be taught for networked printers that are widely available.

It is important to note, however, that *Hanada* does not notify information providers of any other condition other than expected print time for current print jobs. It is also important to note that this time-based "status" provided by *Hanada* is provided after the information provider has already engaged with the printer or data has already been presented, which implies that the user is already engaged with and intends to utilize only one particular printer. It is also noteworthy that a wireless device in *Hanada* is never presented with other rendering options, which implies user dedication to a single printing source.

Therefore, *Hanada* is limited in the type of status information provided, by when it is provided and how it is provided (e.g., via short range infrared communications only after data has already been sent to the printer).

Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5 in *Hanada* are cited in support of a printer as a data rendering device. That the *Hanada* printer is a data rendering device in the form of a "printer" is not disputed. Fig 1, item 2; column 2, lines 48-52, lines 66-67, and column 3, lines 1-5, 13-20, 34-43 and 56-63 in *Hanada* are cited in support of teaching the identification of operational status; yet all that is taught by these section of *Hanada* is the concept of determining current document print completion time and a enabling time status calculation, which are status that is provided after, not before, a user has already decided to use the one printer. The short range communication taught in *Hanada* also implied that the user is in close proximity with (physically in front of) the printer, which is necessary for infrared communications. The sections of *Hanada* cited by Examiner for support of operational readiness are provided below:

~~fying the information apparatus of it.~~ The information apparatus transmits the print data to the printer when the first period of time is elapsed. Thus, the information apparatus needs not be kept in a status of reception or transmit data for inquiry so as to inquire about a status of the printer. 5 Consequently, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

Preferably, the step of calculating the first period of time includes a step of calculating a period of time it takes before 10 image formation for print data which is currently in the process of image formation is completed.

The printer calculates a period of time it takes before the currently processed image formation is completed for notifying the information apparatus of it. When the period of 15 time is elapsed, the information apparatus transmits print data to the printer. Thus, even when a plurality of information apparatuses inquire about the status of the printer, each of the information apparatuses needs not be kept in the status of reception or transmit data for inquiry. Accordingly, the 20 information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.

· · · ·

    The printer calculates a period of time it takes before all of the currently processed image formation and that in a stand-by status are completed for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the period of time is elapsed. Thus, even when three or more information apparatuses inquire about the status of the printer, each information apparatus needs not be kept in the status of reception or transmit data for inquiry. Therefore, the information apparatus can automatically transmit a plurality of data successively, thereby reducing power consumption.   35

   40

· · · ·

    The printer calculates the first period of time it takes before it becomes ready to receive print data for notifying the information apparatus of it. The information apparatus transmits print data to the printer when the first period of 60 time is elapsed. Thus, the information apparatus needs not be kept in the status of reception for inquiring about the status of the printer or transmit data for inquiry. Accordingly, the

    Clearly, *Hanada* is only concerned about how much "processing time" a print job will take <u>after</u> it is already processing the data. This type of status is not what was meant in Appellant's definition of "operational status". The status provided by *Hanada* does not prevent a mobile device user from wasting time locating an inoperable data rendering device and, thereby, wasting time.

    An important claimed feature of the present invention is not taught or suggested by *Theimer et al* and *Hanada* is the ability <u>to use a network resource</u> to check on the "*operational readiness*" of data rendering devices prior to a handheld wireless device user being sent by network resource to a DRD's location. The description indicates that a "status monitoring means 27" as shown in Figure 2 enables this functionality. It can again be appreciated that valuable handheld device user time would be wasted if a user is sent by network resources to a malfunctioning or occupied DRD. "Operating readiness" as claimed by Appellant as described in specification is only concerned with whether a located DRD is fit for proper functioning, ready for use, prepared,

available for service, action or progress, as commonly defined. At page Appellant's detailed description where Figure 11 is described, the following is written with respect to operation readiness:

> Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

Appellant's teaching of operational readiness is clearly to determine if a DRD is fit for proper functioning, ready for use, or otherwise prepared or available for service, action, or progress. Processing time is irrelevant if the DRD is not ready or available for service. In describing Figure 11, Appellant's detailed description states the following with respect to operation readiness:

> Although a DRD may seem appropriate for temporary assignment to the WD/user for data rendering because of its proximity to and/or profile match with the WD/user, it may not be available for rendering. For example, a DRD may not be available for rendering because it is out of service or has already reached its schedules/queued/potential capacity for data delivery/rendering based on a report by dedicated status monitoring means at the DRD.

By not teaching operational readiness as taught by Appellant in Independent claims 1, 30, 100 and 106, *Theimer et al* in combination with *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* fails to teach or suggest an invention that will remotely determine the "*operational readiness*" of data rendering devices on behalf of wireless devices, as taught and defined by Appellant and claimed in independent claims 1, 30, 100 and 106.

Theimer et al in combination with *Hanada* therefore fails in the "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3, and also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. Appellant can further show that the combination of *Theimer et al* with *Hanada* fails because of the teachings of *Theimer et al*, which is the core reference used against the appealed claims is not specifically concerned with the operational readiness of a device or the time it would take to render data; *Theimer et al* is primarily interested in ensuring that data is transferred to the correct target device, which is a limitation and focus that will be described in more detail below.

ii. Regarding "Public Accessibility."

Theimer et al is the core reference used to reject the claims during prosecution and will likely be the main focus for analysis by the Board; Therefore, the rest of Appellant's argument remains focused on *Theimer et al*.

The Examiner heavily emphasized aspects the *Theimer et al* reference throughout the prosecution history. Examiner specific references Figures 1 and 2 in *Theimer et al* in rejecting Appellant's independent claims 1, 15, 30, 100 and 106 stating that "Theimer teaches a method of brokering data between handheld wireless devices and data rendering devices with locations and capabilities not previously known to the hand held wireless devices or their users..." Figures 2 and 1 are copied below from *Theimer et al* for the Board's reference and convenience.

FIG. 2 (One Room)

Application No.: 09/887,492
Ortiz-1001

FIG. 1
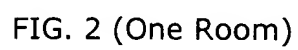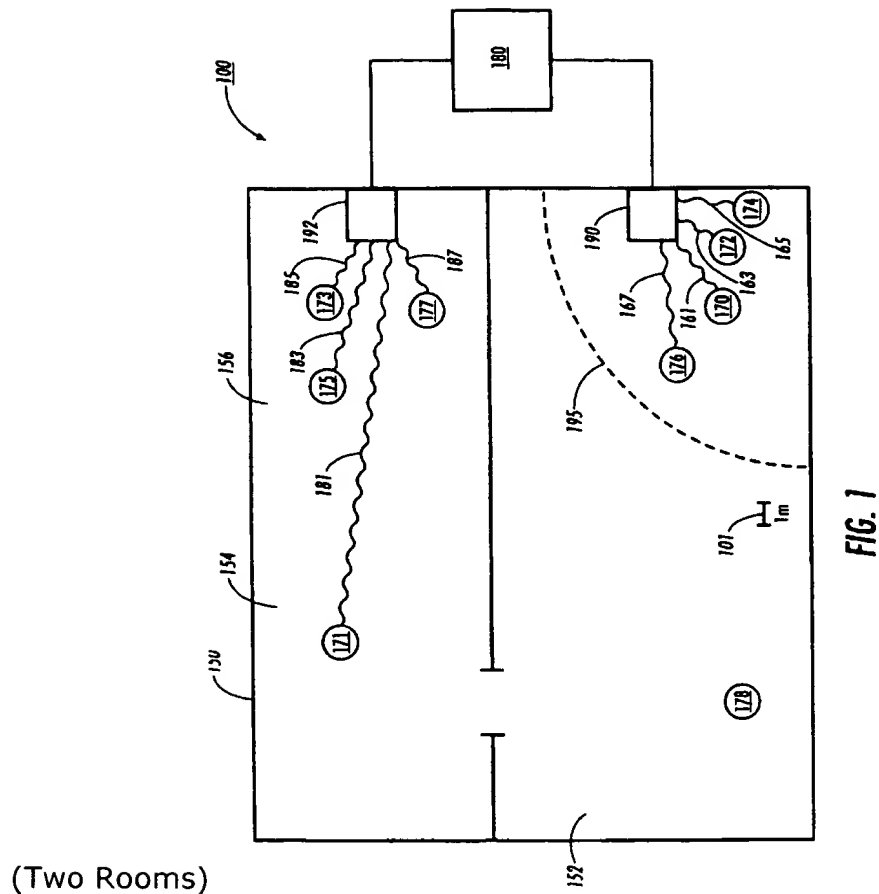
(Two Rooms)

In describing Figure 1, *Theimer et al* is primarily concerned with communication (data transfer) between electronic devices located in two rooms of a building. Figure 2 clearly shows a single room deployment for the *Theimer et al* spatial location and selective data transfer concept used between electronic devices in close proximity to each other. The detailed description for Figure 1 states:

> In FIG. 1, the spatial localizing modules **190** and **192** track a plurality of electronic devices, indicated as circles **170–178**. The electronic devices are distributed throughout two rooms **152** and **154** of a building **150**, with a spatial localizing module respectively located in each room. A scale marker **101** representing a distance of one meter is shown for scale. The electronic devices **170–178** in the building **150** may be, for example, personal digital assistants, two-way pagers, laptop or notebook computers, computer tablets, or any other electronic device capable of wireless communication through radio, infrared, acoustic or other transmission links. In FIG. 1, communication links for data transmission are generically illustrated by wavy lines **161, 163, 165, 167,** and **181,183,185,** and **185.**

30

35

40

40

Application No.: 09/887,492

Ortiz-1001

Examiner cites to the Abstract, column 4, lines 42-47, 52-66, and column 5, lines 14-19, for the concept of data rendering devices being located at fixed, publicly accessible locations not yet known to a PDA or its user. The abstract and Figures 1 and 2 clearly teach that devices are located in close proximity to each other, and sometime in the very same room. The *Theimer et al* Abstract states:

> A system for transferring digital information to <u>spatially localizable portable electronic devices</u> has a plurality of portable electronic devices, with each portable electronic device supporting wireless communication. A <u>spatial module determine spatial location with submeter precision for each of the plurality of electronic devices</u>, and communication module is connected to the spatial localizing module for mediating wireless communication between portable electronic devices. <u>A user can define electronic data transfers between portable electronic devices in **user determined spatial locations** with submeter precision</u>. Data transfers are possible to adjacent electronic devices, electronic devices within a defined radius, electronic devices along a defined bearing or having specific orientation, or even <u>located within a defined set of regions or rooms</u>.

[*Emphasis added.*]

It is clearly described in *Theimer et al* that the preferred embodiment therein is to use CCD cameras to determine the physical location of an electronic device is a defined space (e.g., a single or neighboring room) given the close spatial proximity of the electronic devices shown and described therein. The main thrust of *Theimer et al* is clearly to enable the <u>short range (or defined range and controlled) transfer of data to select devices that are located near each other in the proximity of other electronic devices that should not receive the transfer</u>. Spatial location control as taught by *Theimer et al* enables users to control what particular portable devices will receive a transfer from another portable device when other portable devices are also in range of the cooperating portable devices. The primary operational examples provided in

Application No.: 09/887,492
Ortiz-1001

Theimer et al are grounded in "adjacent transfer" of data from one portable device, such as a PDA, to one or a select group of devices, such as other PDAs, in close proximity to the transferring device.

Appellant has previously shown Examiner that *Theimer et al* is interested in submeter applications and specifically states this at Column 2, lines 8-13:

> **"a range of spatial locations and orientations can be specified with transmission to adjacent electronic devices, to all electronic devices in a room, to all electronic devices in a particular orientation or direction, or even to all electronic devices at spatial locations within a specified range (e.g., within two meters)."**

Theimer et al goes further by states that a user of the electronic devices (e.g., located within the same room) can "define electronic data transfers between portable electronic devices in user determined spatial locations with submeter precision."

Theimer clearly shows that its features are most evidently advantageous when used in submeter applications and shows specific examples within the same physical space (i.e., a room) where IR transmitters and CCD cameras enable highly precise spatial location of tagged electronic devices.

Column 4, lines 42-47, 52-66 and column 5, lines 14-19 of *Theimer et al* cited by Examiner were again consulted by Appellant in preparation of this Appeal Brief, but these sections of the *Theimer et al* detailed disclosure do not reveal the aspect of fixed, publicly accessible data rendering devices not yet know to wireless devices selected for rendering data selected from a portable device (PDA). What is clear from these cited portions of *Theimer et al*, however, is that the transfer of data from one portable device to another within submeter range is its predominant feature. In fact enabling communications at as small as centimeter or millimeter distances between electronic devices is further discussed at column 4, lines 42-50, which provides:

In operation, the system **100** is capable of determining both relative and absolute spatial location of other electronic devices with submeter precision, and mediate transmission
45 or reception of data only to specified electronic devices **170–178** based on the relative or absolute spatial location of those electronic devices. In certain preferred embodiments discussed later in connection with FIG. 2, centimeter or even millimeter scale spatial localization is possible, however, for
50 many applications submeter precision is adequate. ~~Data~~

The combination of *Theimer et al* with *Hanada* as cited prior art clearly fails support the "teaching or suggestion of all the claim limitations" under M.P.E.P. §2143 criteria 3. *Theimer et al* in view of *Hanada* does not teach or suggest fixed, <u>publicly accessible data rendering devices not yet know to a wireless device that are operational and can be selected using communications network support based on wireless device location for rendering data selected from a wireless device, and with directions provided to the wireless devices so that the data rendering devices can be physically located</u>. This is what is being claimed by Appellant and claimed in independent claims 1, 15, 30, 100 and 106.

Theimer et al in view of *Hanada* also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. *Theimer et al* combined with *Hanada* does not provide some suggestion or motivation that fixed, publicly accessible data rendering devices that are verifiably operational and not yet know to wireless devices that can be presented to wireless devices to select for rendering data selected from a wireless device, and that directions to physically find a selected data rendering device can be provided to the wireless devices, as taught by Appellant and claimed in independent claims 1, 15, 30, 100 and 106.

The general location of electronic devices taught in *Theimer et al* and *Hanada* are already known. Locating unknown, publicly accessible rendering device on behalf of a wireless device using communications network resources is not taught or suggested in *Theimer et al* and *Hanada*. Finally, <u>The provision</u>

Application No.: 09/887,492
Ortiz-1001

of navigable directions to wireless devices in order to physically locate data rendering device is also not taught or suggested by *Theimer et al* and *Hanada*.

iii. Regarding "Locating DRDs."

Examiner states that *Theimer et al* teaches "providing a request from a WD through a telecommunications network supporting voice and data communications by the WD to remote network resources for the remote network resource to locate at least one DRD, the network resource further adapted to identify the location, rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD..." referring specifically to column 1, lines 57-65, column 4, lines 42-62. The Examiner goes on to state that public availability of GPS for navigation by civilians has been available since the year 1980, and is the only statement without citation used by Examiner in support that *Theimer et al* teaches a determination of DRD locations.

The cited sections in *Theimer et al* do not support Examiner's suggestion. *Theimer et al* does not teach providing a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

Pages 26 and 27 of Appellant's specification describe how Appellant's claimed invention locates a DRD, as follows:

When the network is requested to assist the WD in locating a DRD, the network can select a DRD for the WD based only on the WDs proximity to the DRD. The network, however, can utilize more than just a WD x, y location within a geographic region based on GPS to find an appropriate DRD for the WD. DRD selection can be based on a profile. Referring to Figure 9, a network server can receive a request from a WD for DRD location based on a profile 91. Profile information can be located in a database (HLR) accessible to the server and/or transferred by the WD as part of the request for assistance. The profile can include new requirements issued by the user regarding locating an appropriate DRD. After

Application No.: 09/887,492
                                                                        Ortiz-1001

the server receives the request, the server locates and identifies a DRD to the WD matching the profile 92. The server sends DRD location information to the WD 93. DRD location information can include address information, driving directions and/or a map. Such information is already available from some Internet websites providing directions/maps. With the present invention, however, the user does not have to provide known WD location information. The server can utilize WD location information known by the server (e.g., based on GPS) to generate directions and/or maps provided to the WD to locate the appropriate DRD.

Referring to Figure 10, a flow diagram of DRD location and data delivery is illustrated. At the WD the user wanting to render data at a DRD can request the network to find a DRDs location 101. A network server will assist the WD as provided in Figure 9. The WD will receive DRD location information provided by the network 102. After DRD location is determined, the WD can have data delivered to the DRD either: directly from the WD 103 after physically locating the DRD, or via a request for data delivery through the network 104.

Appellant does not dispute that GPS has been available for some time. In fact patents related to GPS were cited in the Background of Appellant's patent application. But *Theimer et al* only mentions the use of _differential GPS for possible_ refinement of spatial localizing modules as needed for further teaching of the spatial location and precise data transfer concept described with respect to Figure 1 in the *Theimer et al* specification (so that short range data transfer between two devices in an environment full of other wireless devices can be controlled):

> ~~hardware.~~ Multiple spatial localizing modules connected to network **180** can be used, and a wide variety of mechanisms for determining spatial location can be employed, including image based techniques, ultrasound or other acoustic
> 25 techniques, or even radio based techniques such as differential GPS.

Differential Global Positioning System (DGPS) is known in the art to be an *enhancement* to Global Positioning System that uses a network of fixed, ground-based reference stations to broadcast the difference between the positions indicated by the satellite systems and the known fixed positions.

Application No.: 09/887,492
                                                                      Ortiz-1001

These stations broadcast the difference between the measured satellite pseudoranges and actual (internally computed) pseudoranges, and receiver stations may correct their pseudoranges by the same amount. Differential GPS has been used for air navigation and precision landing of aircraft. As an example, differential GPS has been incorporated as a Ground Based Augmentation System and Ground based Regional Augmentation System to broadcast GPS corrections for aircraft locations via the aviation VHF band.

It is clear after reading the detailed description in *Theimer et al* that the skilled would be taught to utilize spatial GPS to determine the precise spatial location of electronic devices located within about two meters of each other in the same environment (e.g., like the room of Figure 2) to enable the controlled transfer of data from one particular device to another (e.g., adjacent device) with submeter precision. *Theimer et al* in view of *Hanada* does not suggest the use of GPS in general for locating devices without concern over submeter precision for the locations. Theimer et al depends on for data transfer to be controlled between closely proximate devices.

Remember that *Hanada* also teaches proximate, infrared data communication between a printer and a information device (e.g., handheld wireless device); therefore, the combination of *Theimer et al* with *Hanada* still fails to teach the ability to provide a request from a wireless device through a telecommunications network supporting voice and data communication by the wireless device to a remote network resource for the remote network resource to identify the location and rendering capabilities of at least one DRD in accordance with a least one of the WD's geographic location and a WD user profile associated with the WD.

iv. Regarding "Providing WD Directions to Located DRDs."

Examiner states that *Theimer et al* teaches providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the

wireless device based on the geographic location of the wireless device. Examiner once again cites column 1, lines 57-65, and column 4, lines 25-27 and 42-62 for support of these important aspects of Appellant's claimed invention. These sections were consulted by Appellant throughout prosecution of the application and again in preparation of this argument, yet support for providing DRD location information to a wireless device and then providing navigable direction on the wireless device to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device could not be found in *Theimer et al*.

Theimer et al does not teach or suggest providing directions from a first device to another using the geographic location of the first device. This is missing from and clearly not needed by *Theimer et al* because the physical location of devices taught in *Theimer et al* is already generally known by users and it is merely the precise spatial location at sub meter accuracy for each device therein that is of primary interest in *Theimer et al*. Nowhere in the combined specifications of in view of *Theimer et al* in view of *Hanada* is it taught or suggested that directions useful for physically locating a DRD can be provided by a network resource to a wireless device.

Appellant's claimed invention allows for a much longer, remote use of GPS where DRD locations and capabilities are unknown. Public DRD locations and places are first located by a network resource on behalf of a wireless device based on the wireless devices GPS location and/or user profile before a DRD can be selected and then physically located using navigable directions to obtain data transferred to the DRD for rendering. Directions are not taught, suggested, or required in *Theimer et al*. In fact, the *Theimer et al* teaching would only be useful if used in Appellant's invention after a data rendering device has already been found based on the wireless device's geographic location, selected using the wireless device and physically located by using navigable directions on the wireless devices. None of this is taught by *Theimer et al* in view of *Hanada*.

Theimer et al in view of *Hanada* fails in "teaching or suggestion of all the claim limitations by the prior art reference" under M.P.E.P. §2143 criteria 3.

Theimer et al in view of *Hanada* also fails to provide "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings" as set forth under criteria 1 of M.P.E.P. §2143. Understanding the objective in *Theimer et al* is to enable accurate sub meter data transfer between devices is important because it reveals that *Theimer et al* is substantially different from, and departs from teachings of, Appellant's invention as claimed.

 Theimer et al in view of *Hanada* simply does teach or suggest the use of communications network resources to assist a wireless device in locating an operational data rendering device that is publicly accessible and located near the wireless device, and then provide navigable direction to the wireless device so that the data rendering device can be physically located. *Theimer et al* in view of *Hanada* does not teach or suggest providing a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device. *Theimer et al* combined with *Hanada* also fails to provide some suggestion or motivation to provide a wireless device with location information for at least one publicly accessible DRD, selecting a DRD with the wireless device, and at least one of the wireless device, the wireless telecommunications network and the network resource providing navigable directions on the WD to physically locate a DRD selected with the wireless device based on the geographic location of the wireless device.

Application No.: 09/887,492
Ortiz-1001

E. SUMMARY OF ARGUMENTS AND CONCLUSION.

In summary, Appellant's claimed invention satisfies a long felt but unfulfilled need for roaming wireless device users such as business travelers to be able to find the unknown location of publicly available data rendering devices so that the roaming wireless device user can view or print electronic documents that are not easily viewable over their wireless handheld devices. *Theimer et al* in view of *Hanada* does not address or fulfill this need, nor does the combination of these references suggest Appellant's solution as claimed.
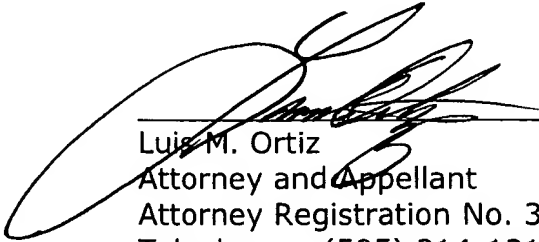
That *Theimer et al* in view of *Hanada* does not teach or suggest the use of wireless telecommunications networks to locate publicly accessible data rendering devices based on wireless device location, determine the operational readiness of data rendering devices, suggest data rendering devices located near the wireless device location for selection and then provide the wireless device with directions over the wireless device to physically find the data rendering device has been shown herein by Appellant. *Theimer et al* combined with *Hanada* does not met the requirements of MPEP to maintain a rejection over Appellant's claims 1, 15, 30, 100 and 106 as unpatentable under 35 U.S.C. 103(a). Therefore, Appellant respectfully requests that the Board reverse Examiner and direct that Appellant's application be processed for prompt issuance following extensive prosecution since the application was filed non-provisionally in 2001, prosecution that has included three Requests for Continued Examination.

Appellant respectfully submits that his arguments as well as the specification and prosecution record support that independent claims 1, 15, 30, 100 and 106 are allowable. Furthermore, Appellants submit that claims 2-3, 7-11, 14, 16-23, 31, 88-94, 97-99, 105, and 107-117 are allowable given their dependence upon their respective independent claims. In light of Appellant's argument, it is respectfully requested that the Board reverse the rejections of claims 1-3, 7-9, 15-20, 22, 23, 30, 31, 89-93, 98-100, 105-113 and 115-117 and require the prompt issuance of claims 1-3, 7-11, 14-23, 30, 31, 88-94,

97-100, and 105-117 so that the loss of additional time is not needlessly experience by Appellant.

The Claims Appendix (VIII) that follows provides a listing of the appealed claims.

Respectfully submitted,

Luis M. Ortiz
Attorney and Appellant
Attorney Registration No. 36,230
Telephone: (505) 314-1311
E-mail: lortiz@olpatentlaw.com

DATE: February 11, 2009

VIII. CLAIMS APPENDIX

1. A method of brokering data between handheld wireless devices and publicly available data rendering devices with locations and capabilities not previously known to the handheld wireless devices or their users, comprising:

identifying data from a handheld wireless device (WD) for rendering at a publicly accessible data rendering device (DRD) located at a fixed, publicly accessible location not yet known to said WD or its user;

providing a request from said WD through a wireless telecommunications network supporting voice and data communications by said WD to a remote network resource for said remote network resource to locate at least one DRD, said at least one DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, said network resource further adapted to identify the location, rendering capabilities and operational status of at least one DRD in accordance with at least one of said WD's geographic location and a WD user profile associated with said WD;

said network resource identifying the location, rendering capabilities and operational status of at least one DRD based on at least one of said WD's location and said WD user profile;

said network resource providing said WD with location information for at least one publicly accessible DRD;

selecting a DRD with said WD;

at least one of said WD, said wireless telecommunications network and said network resource providing navigable directions on said WD to physically locate a DRD selected with said WD based on the geographic location of said WD; and

transferring said data at the request of said WD to said DRD from at least one of an email box or a memory associated with said WD, said data transferred to said DRD for rendering.

2. The method of claim 1 including a step wherein said DRD renders the data only after a render command is provided to said DRD through said WD.

3. The method of claim 2 wherein said render command includes a passcode.

7. The method of claim 1 wherein the data is rendered by said DRD after said render command is provided by a WD user on a user interface associated with said DRD.

8. The method of claim 1 wherein the data is retrieved from a memory assigned to the WD user only after the WD user provides a passcode to said DRD.

9. The method of claim 8 wherein said passcode is provided to said DRD by the WD.

10. The method of claim 8 wherein said passcode is provided at a user interface associated with said DRD.

11. The method of claim 8 wherein said command includes decryption coding.

14. The method of claim 1 including a step wherein said network resource provides the WD with a passcode for use on an interface integrated with said DRD to cause said DRD to render the data.

15. A method of brokering data between a wireless device (WD) and a publicly accessible data rendering device (DRD), the DRD further comprising at least one of a printer, a video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, wherein the DRD is not assigned to the WD, the DRD's physical location is not known by the WD and its user, and the DRD is

publicly accessible to all WD users, wherein a WD user performs the following steps at the WD:

identifying data with the WD to render at a publicly accessible DRD;

providing a DRD locator request with the WD to public communications network resources through a wireless cellular communications network supporting wireless voice and data communications by the WD, the DRD locator request being provided for said public communication network resources to find at least one publically accessible DRD located near the WD, the locator request further including WD geographic location information;

receiving DRD location information and rendering capabilities at the WD for the at least one publicly accessible DRD located near the WD, wherein DRD location information is based on said WD geographic location information;

selecting a DRD with the WD for rendering said data;

providing directions to the WD to physically locate the DRD selected by the WD, said directions provided to the WD from at least one of the WD and the network resource based on the WD geographic location information;

physically locating the DRD at the DRD's publicly accessible location; and

requesting at the WD that the data be transferred to the DRD through at least one of said public wireless cellular communications network and a short range wireless communications link with the DRD.

16. The method of claim 15 wherein said data is transferred to said DRD from said public wireless communications network resources following the request at said WD.

17. The method of claim 16 wherein said public wireless communications network resources facilitates transfer of said data to said DRD from a memory associated with said WD.

18. The method of claim 17 wherein said step of requesting that said data be transferred to said DRD is followed by a step that includes entering a passcode by the WD user at said DRD to render the data.

19. The method of claim 16 wherein said data is retrieved from a mailbox assigned to said WD only after a passcode is provided to said DRD by said WD user.

20. The method of claim 19 wherein said passcode is provided to said DRD by said WD.

21. The method of claim 19 wherein said passcode is provided at a user interface associated with said DRD.

22. The method of claim 15 wherein said DRD renders data after a render command is provided to said DRD by said WD user.

23. The method of claim 22 wherein said render command includes a passcode.

30. A method of brokering data between wireless devices and publicly accessible data rendering devices, comprising enabling a user of a wireless device to perform the following steps:

using a wireless device (WD) to request support through a wireless cellular telecommunications network to a remote server adapted to maintain location and capability information for data rendering devices, to locate at least one publicly accessible data rendering device (DRD) and provide publicly accessible DRD capability information stored in the remote server, and wherein the at least one DRD is not previously assigned to the WD and its location not previously known to the WD or its user, and the at least one DRD is physically accessible to all WD users, wherein locating of at least one DRD is facilitated by said remote server in cooperation with the wireless cellular telecommunications network in accordance with at least one of a WD user profile and the geographic location of the WD;

Application No.: 09/887,492
Ortiz-1001

receiving DRD location and capability information at the WD for ~~the~~ at least one DRD located near the WD;

selecting a DRD with said WD for rendering data;

the network resource verifying operational readiness of the DRD selected by the WD and providing directions on the WD for the user to follow to physically locate the DRD selected with the WD if the DRD selected by the user is deemed operational, the directions provided to the WD based on the geographic location of the WD;

selecting data with the WD for rendering at the DRD once the DRD has been physically located by the user; and

providing the data from at least one of a memory and email box associated with the WD, at the request of the WD, to the DRD for rendering.

31. The invention of claim 30, wherein said DRD renders said data after a render command is provided at said DRD by the user associated with said WD.

88. The method of claim 31 wherein said rendering command includes decryption coding.

89. The method of claim 30 further comprising the steps of:

receiving at a network server a request associated with said WD for delivery of said data for rendering at said DRD;

determining if delivery of said data can be approved by at least one of said network and/or said DRD; and

if delivery is approved, said server processes the request including facilitating delivery of said data to said DRD.

90. The method of claim 89 further comprising the step of receiving said data from said server at said DRD.

91. The method of claim 90 wherein said data is received at said DRD via a data network supporting said DRD.

92. The method of claim 90 further comprising the step of rendering said data at said DRD following a rendering command received at said DRD by said WD.

93. The method of claim 92 wherein said rendering command includes a passcode.

94. The method of claim 92 wherein said rendering command includes decryption coding.

97. The method of claim 1 wherein said rendering command includes decryption coding.

98. The method of claim 1 wherein said commands enable WD user manipulation of said data during rendering of said data at said DRD using said WD.

99. The method of claim 98 wherein said DRD is at least one of: a presentation projector, a video display, and a photocopier.

100. A method using a wireless cellular telecommunications network adapted for supporting wireless hand held device users in voice and data communications and with brokering data between handheld wireless devices and publicly accessible data rendering devices where physical locations for publicly accessible data rendering devices are not previously known to the wireless hand held device users, steps of the method carried out by a hand held wireless device user comprising:
    providing a request over the wireless cellular telecommunication network from a handheld wireless device (WD) to a remote data network

resource to locate at least one publicly accessible data rendering device (DRD) and identify operational readiness and rendering capabilities for the at least one publically accessible DRD matching user requested rendering capabilities also provided from the WD, said remote data network resource adapted to provide assistance to WD users to locate and assess publicly accessible DRDs by determining WD geographic location, locating at least one operational DRD located near the WD based on the WD geographic location and DRD rendering capabilities, and then identifying on the WD at least one DRD that is operational, matches user requested rendering capabilities and is geographically located near the WD;

receiving location information for at least one publicly accessible DRD at the WD from the network resource through the wireless cellular telecommunications network supporting wireless communication by the WD, said location information identifying at least one DRD geographically located near the WD that is operational and matches user rendering capabilities;

selecting only one DRD from the at least one publicly accessible DRD using the WD;

obtaining directions to the only one DRD using at least one of the WD, the wireless cellular telecommunications network, and GPS based on the geographic location of the WD;

selecting data for rendering at the DRD using the WD after the only one DRD is physically located; and

transferring data using the WD to the DRD for rendering.

105. The method of claim 100 wherein said commands enable the WD user to manipulate said data during its rendering at said DRD using said WD.

106. A location based service method using data communications network resources to assist a user of a GPS-enabled hand held wireless device supported by a wireless cellular telecommunications network to locate a publicly accessible data rendering device (DRD) whose location is not previously known to the user, the publicly accessible DRD comprising at least

one of a printer, video monitor, an Internet Kiosk, a multimedia projector, or an ATM machine, the method comprising the steps of:

receiving a user request provided over the wireless cellular telecommunications network from a user of the GPS-enabled hand held wireless device to a data communications network resource for assistance in locating a publicly accessible DRD based on geographic location information for the GPS-enabled wireless hand held device, rendering capabilities required by the user, and operational readiness of publicly accessible DRDs;

the data communications network resource determining the geographic location of the GPS-enabled hand held wireless device;

the data communications network resource using the geographic location of the GPS-enabled hand held wireless device to locate at least one publicly accessible DRD located near the GPS-enabled hand held wireless device that is operational and matches the rendering capabilities required by the user;

the data communications network resource identifying the at least one publicly accessible DRD including its geographic and physical location to the GPS-enabled hand held wireless device;

the user selecting only one publicly accessible DRD for rendering data; and

the GPS-enabled hand held wireless device with the support of at least one of GPS and the wireless cellular telecommunications network providing the user directions to physically locate the only one publicly accessible DRD given the geographic location of the GPS-enabled hand held wireless device.

107. The method of claim 106 further comprising the steps of:

receiving a request at a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data to the at least one publicly accessible DRD identified by the network resource; and

said network server transferring said data to said at least one publicly accessible DRD in response to the request.

108. The method of claim 107 further comprising the step of said at least one publicly accessible printer receiving said data from said network server.

109. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of the wireless hand held device directly onto a user interface associated with the at least one publicly available DRD.

110. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from the wireless hand held device.

111. The method of claim 108 further comprising the step of said at least one publicly accessible DRD rendering said data it received from the network server after further receiving a wireless authorization signal provided locally from the wireless hand held device.

112. The method of claim 106 further comprising the steps of:

a user of said GPS-enabled hand held wireless device physically locating said publicly accessible DRD;

the user of said GPS-enabled hand held wireless device transmitting a request to a network server from said GPS-enabled hand held wireless device to retrieve data stored in memory associated with said GPS-enabled wireless hand held device and to transfer said data said publicly accessible; and

said network server transferring said data to said publicly accessible DRD in response to the request.

113.   The method of claim 112 further comprising the step of said publicly accessible DRD receiving said data from said network server.

114.   The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving a passcode entered by the user of said wireless hand held device directly onto a user interface associated with said publicly accessible DRD.

115. The method of claim 113 further comprising the step of said publicly accessible DRD rendering said data it received from the network server after further receiving an infrared authorization signal from said wireless hand held device.

116. The method of claim 113 further comprising the step of said-publicly accessible DRD rendering said data it received from said network server after further receiving a wireless authorization signal provided locally from said wireless hand held device.

117. The method of claim 106 further comprising the steps of:
a user of a hand held wireless device physically locating a publicly accessible DRD;
the user of said hand held wireless device wirelessly transmitting data from said hand held wireless device to said publicly accessible DRD
said publicly accessible DRD receiving said data from said hand held wireless device; and
said publicly accessible DRD rendering said data.

X. EVIDENCE APPENDIX

NONE

Application No.: 09/887,492
                                    Ortiz-1001

XI. RELATED PROCEEDINGS APPENDIX

NONE

Application No.: 09/887,492
Ortiz-1001